

Claims

1. A system for removing heat from a semiconductor integrated circuit in electronic equipment, comprising:

a heat sink member attached to a semiconductor integrated circuit which is part of an integrated circuit board assembly; and

a mounting member connected to or part of a chassis portion of the electronic equipment and an attachment element positioned on the mounting member for receiving and releasing the heat sink, wherein when the heat sink is received by the attachment element, a low thermal resistance path is established from the integrated circuit to the mounting member, permitting heat to be conveniently removed from the integrated circuit.

2. The system of claim 1, wherein the attachment element is a spring clip having two opposing inwardly directed end portions for holding the heat sink.

3. The system of claim 2, wherein the mounting member includes two spaced opposed openings through which the end portions of the clip extend, and wherein the spring clip has a central portion which is on the opposite side of the mounting member from the two end portions when the spring clip is operatively positioned on the mounting member.

4. The system of claim 3, wherein the heat sink comprises two flange portions joined together by an intermediate portion of less cross-sectional area than the flange portions, such that one of the flange portions can be moved into firm engagement between the end portions of the clip and the adjacent surface of the mounting member.

5. The system of claim 1, wherein the heat sink is permanently attached to the integrated circuit on the integrated circuit board assembly.

6. The system of claim 1, wherein the mounting member is insertable into the equipment chassis in a low thermal resistance relationship therewith.

7. The system of claim 1, wherein the mounting member comprises a part of the equipment chassis.

8. The system of claim 1 wherein the mounting member includes an embossed area on a surface thereof adjacent the end portions of the operatively positioned spring clip.

9. The system of claim 4, wherein the flange portions are circular and the intermediate portion is cylindrical.

10. The system of claim 4, wherein the flange portions are approximately square and are each larger than the intermediate portion, sufficient to permit the heat sink to be conveniently engaged by the end portions of the spring clips against the adjacent surface of the mounting member.

11. The system of claim 1, wherein the end portions each include corner parts which flare downwardly from the end portions.

12. The system of claim 8, wherein the embossed area includes a lubricant.